- (2) As used with respect to the certification of aircraft, means those aircraft which are similar in design. Examples include: DC-7 and DC-7C; 1049G and 1049H; and F-27 and F-27F.
- (3) As used with respect to the certification of aircraft engines means those engines which are similar in design. For example, JT8D and JT8D-7 are engines of the same type, and JT9D-3A and JT9D-7 are engines of the same type.

United States, in a geographical sense, means (1) the States, the District of Columbia, Puerto Rico, and the possessions, including the territorial waters, and (2) the airspace of those areas.

United States air carrier means a citizen of the United States who undertakes directly by lease, or other arrangement, to engage in air transportation

VFR over-the-top, with respect to the operation of aircraft, means the operation of an aircraft over-the-top under VFR when it is not being operated on an IFR flight plan.

Warning area. A warning area is airspace of defined dimensions, extending from 3 nautical miles outward from the coast of the United States, that contains activity that may be hazardous to nonparticipating aircraft. The purpose of such warning areas is to warn nonparticipating pilots of the potential danger. A warning area may be located over domestic or international waters or both.

Winglet or tip fin means an out-ofplane surface extending from a lifting surface. The surface may or may not have control surfaces.

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EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §1.1, see the List of CFR Sections Affected appearing in the Finding Aids section of this volume.

§ 1.2 Abbreviations and symbols.

In Subchapters A through K of this chapter:

AGL means above ground level.

ALS means approach light system.

ASR means airport surveillance radar.

ATC means air traffic control.

CAS means calibrated airspeed.

CAT II means Category II.

CONSOL or CONSOLAN means a kind of low or medium frequency long range navigational aid.

DH means decision height.

DME means distance measuring equipment compatible with TACAN.

EAS means equivalent airspeed.

FAA means Federal Aviation Administration.

FM means fan marker.

GS means glide slope.

HIRL means high-intensity runway light system.

IAS means indicated airspeed.

ICAO means International Civil Aviation Organization.

IFR means instrument flight rules.

ILS means instrument landing system.

IM means ILS inner marker.

INT means intersection.

 $\ensuremath{\textit{LDA}}$ means localizer-type directional aid.

LFR means low-frequency radio range.

LMM means compass locator at middle marker.

LOC means ILS localizer.

LOM means compass locator at outer marker.

M means mach number.

 $\it MAA$ means maximum authorized IFR altitude.

MALS means medium intensity approach light system.

MALSR means medium intensity approach light system with runway alignment indicator lights.

MCA means minimum crossing altitude.

MDA means minimum descent altitude.

MEA means minimum en route IFR altitude.

MM means ILS middle marker.

MOCA means minimum obstruction clearance altitude.

MRA means minimum reception altitude.

MSL means mean sea level.

NDB(ADF) means nondirectional beacon (automatic direction finder).

NOPT means no procedure turn required.

OEI means one engine inoperative.

OM means ILS outer marker.

PAR means precision approach radar. RAIL means runway alignment indicator light system.

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RBN means radio beacon.

RCLM means runway centerline marking.

RCLS means runway centerline light system.

REIL means runway end identification lights.

'RR'' means low or medium frequency radio range station.

RVR means runway visual range as measured in the touchdown zone area. SALS means short approach light system

SSALS means simplified short approach light system.

SSALSR means simplified short approach light system with runway alignment indicator lights.

TACAN means ultra-high frequency tactical air navigational aid.

TAS means true airspeed.

TCAS means a traffic alert and collision avoidance system.

TDZL means touchdown zone lights. TVOR means very high frequency terminal omnirange station.

 V_A means design maneuvering speed. V_B means design speed for maximum

gust intensity. V_C means design cruising speed.

 V_D means design diving speed.

 V_{DF}/M_{DF} means demonstrated flight diving speed.

 V_{EF} means the speed at which the critical engine is assumed to fail during takeoff.

 V_F means design flap speed.

 $V_{FO}M_{FC}$ means maximum speed for stability characteristics.

 V_{FE} means maximum flap extended speed.

 V_H^{\prime} means maximum speed in level flight with maximum continuous power.

 V_{LE} means maximum landing gear extended speed.

 V_{LO} means maximum landing gear operating speed.

 V_{LOF} means lift-off speed.

 V_{MC} means minimum control speed with the critical engine inoperative.

 V_{MO}/M_{MO} means maximum operating limit speed.

 V_{MU} means minimum unstick speed.

 V_{NE} means never-exceed speed.

 V_{NO} means maximum structural cruising speed.

 V_R means rotation speed.

 V_S means the stalling speed or the minimum steady flight speed at which the airplane is controllable.

 V_{50} means the stalling speed or the minimum steady flight speed in the landing configuration.

 V_{SI} means the stalling speed or the minimum steady flight speed obtained in a specific configuration.

 V_{TOSS} means takeoff safety speed for Category A rotorcraft.

 V_X means speed for best angle of climb. V_Y means speed for best rate of climb.

 V_1 means the maximum speed in the takeoff at which the pilot must take the first action (e.g., apply brakes, reduce thrust, deploy speed brakes) to stop the airplane within the accelerate-stop distance. V_1 also means the minimum speed in the takeoff, following a failure of the critical engine at $V_{\rm EF}$, at which the pilot can continue the takeoff and achieve the required height above the takeoff surface within the takeoff distance.

 V_2 means takeoff safety speed.

 V_2 min means minimum takeoff safety speed.

VFR means visual flight rules.

VHF means very high frequency.

VOR means very high frequency omnirange station.

 $\mbox{'}\textit{ORTAC}$ means collocated VOR and TACAN.

[Doc. No. 1150, 27 FR 4590, May 15, 1962]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §1.2, see the List of CFR Sections Affected appearing in the Finding Aids, section of this volume.

§ 1.3 Rules of construction.

- (a) In Subchapters A through K of this chapter, unless the context requires otherwise:
- (1) Words importing the singular include the plural;
- (2) Words importing the plural include the singular; and
- (3) Words importing the masculine gender include the feminine.
- (b) In Subchapters A through K of this chapter, the word:
- (1) Shall is used in an imperative

(2) May is used in a permissive sense to state authority or permission to do the act prescribed, and the words "no person may * * *" or "a person may